



CLEAN VERSION OF PENDING CLAIMS

BURST/PIPELINED EDO MEMORY DEVICE Applicant: Jeffrey S. Mailloux et al. Serial No.: 08/984,560

Claims <u>11-21</u> and <u>59-71</u>, as of May 14, 2001 (Date of Response to First Office Action after RCE).

11. A storage device comprising:

control logic for selecting between a patternless addressing scheme and a patterned addressing scheme; and

switching circuitry for switching between a first pathway and a second pathway depending on which of said patternless addressing scheme and said patterned addressing scheme is selected.

- 12. A storage device, as in Claim 11, wherein the storage device is asynchronous.
- 13. (Once Amended) A storage device, as in Claim 11, wherein the first pathway and the second pathway are coupled to a temporary storage device for providing at least one external address to the switching circuitry.
- 14. A storage device, as in Claim 13, wherein the external address is temporarily stored in the temporary storage device prior to being sent to a decoder.
- 15. (Once Amended) A storage device, as in Claim 14, further comprising a counter coupled to the temporary storage device to receive a selected portion of the external address for generating an internal address.
- 16. (Once Amended) A storage device, as in Claim 15, wherein the internal address is provided to the temporary storage device through the switching circuitry.

Serial No.: 08/984,560

- 17. A storage device, as in Claim 16, wherein the patternless addressing scheme provides a pipelined extended data out pattern.
- 18. A storage device, as in Claim 17, wherein the patterned addressing scheme provides a burst extended data out pattern.
- 19. A storage device, as in Claim 18, wherein the switching circuitry includes at least one multiplexed device.
- 20. (Once Amended) A storage device, as in Claim 11, wherein the patternless addressing scheme is for a random column address access, and the patterned addressing scheme is for a sequential column address access.
- 21. (Once Amended) A storage device, as in Claim 20, wherein the sequence column address access is selected from a group consisting of an interleaved column address access and a linear column address access.
- 59. A memory device, comprising:

a memory array;

control logic operatively connected to the memory array, the control logic for selecting between an unpatterned pipeline and a patterned burst data pattern for accessing the memory array; and

switching circuitry for switching between a first pathway and a second pathway depending on which of said pipeline scheme and said burst scheme is selected.

60. A memory device, comprising:

a memory array operable in a burst or a pipeline mode of operation;

control logic for selecting between the burst or the pipeline mode of operation; and

Page 3

Serial No.: 08/984,560

switching circuitry for switching between a first, burst data pathway and a second, pipeline data pathway depending on which of the burst or pipeline modes of operation is selected.

- 61. A dynamic random access memory, comprising:
 - a plurality of addressable memory arrays;
 - a column address decoder for receiving an external column address;
 - control logic for selecting between a burst or a pipeline mode of operation based;
- switching circuitry for switching between a burst pathway and a pipeline pathway

depending on which of the burst or pipeline modes of operation is selected.

- 62. (New) A storage device comprising:
- control logic for selecting between a patternless addressing scheme and a patterned addressing scheme;

a counter; and

switching circuitry for switching between a first pathway and a second pathway depending on which of said patternless addressing scheme and said patterned addressing scheme is selected, wherein the first pathway and the second pathway are coupled to a temporary storage device for providing at least one external address to the switching circuitry, and wherein the counter is coupled to the temporary storage device to receive a selected portion of the external address for generating an internal address.

- 63. (New) The storage device of Claim 62, wherein the internal address is provided to the temporary storage device through the switching circuitry
- 64. (New) The storage device of Claim 62, wherein the patternless addressing scheme provides a pipelined extended data out pattern.

Serial No.: 08/984,560

65. (New) A storage device comprising:

control logic for selecting between a patternless addressing scheme and a patterned addressing scheme; and

switching circuitry for switching between a first pathway and a second pathway depending on which of said patternless addressing scheme and said patterned addressing scheme is selected, wherein the patternless addressing scheme provides a pipelined extended data out pattern.

- 66. (New) The storage device of Claim 65, wherein the patterned addressing scheme provides a burst extended data out pattern.
- 67. (New) The storage device of Claim 65, wherein the switching circuitry includes at least one multiplexed device.
- 68. (New) A storage device comprising:

control logic for selecting between a patternless addressing scheme and a patterned addressing scheme; and

switching circuitry for switching between a first pathway and a second pathway depending on which of said patternless addressing scheme and said patterned addressing scheme is selected, wherein the patterned addressing scheme provides a burst extended data out pattern.

- 69. (New) The storage device of Claim 68, wherein the switching circuitry includes at least one multiplexed device.
- 70. (New) A memory device, comprising:

 a memory array operable in a burst mode of operation or a pipelined mode of operation;

 control logic for selecting between the burst mode of operation or the pipelined mode of operation; and

PENDING CLAIMS Docket No. 303.623US2 Micron Ref. No. 95-0653.01 Page 5 Serial No.: 08/984,560

switching circuitry for switching between a first, burst data pathway and a second, pipeline data pathway depending on which of the burst or pipelined modes of operation is selected, wherein the first pathway and the second pathway are coupled to a temporary storage device for providing at least one external address to the switching circuitry.

71. (New) The memory device of Claim 70, further comprising a counter coupled to the temporary storage device to receive a selected portion of the external address for generating an internal address.